

IN-SITU PLUG FILL

ABSTRACT OF THE DISCLOSURE

5 A method for forming damascene features in a dielectric layer over a
barrier layer over a substrate is provided. A plurality of vias are etched in the
dielectric layer to the barrier layer with a plasma etching process in the plasma
processing chamber. A patterned photoresist layer is formed with a trench pattern.
Within a single plasma process chamber a combination via plug deposition to
10 form plugs in the vias over the barrier layer and trench etch is provided.